U.S. Army Corps
of Engineers
Wilmington District

Philpott Lake, Virginia (Section 216) Feasibility Study

Meeting Of Stakeholders, Executive Committee, Planning Team
Martinsville, Virginia
March 7, 2007

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Philpott Lake, Virginia (Section 216) Study
Project Purposes

Specifically Authorized Project Purposes

- Flood Damage Reduction
- Hydropower

Other Project Purpose

- Recreation
- Water Supply
- Fish and Wildlife
- Low Flow Releases

Philpott Lake, Virginia (Section 216) Study
What is a Section 216 Study?

Public Law (PL) 91-611 River and Harbor and Flood Control Act of 1970

"The Secretary of the Army, acting through the Chief of Engineers, is authorized to **review the operation** of projects the **construction** of which has been **completed** and which were constructed **by the Corps of Engineers** in the interest of navigation, flood control (flood damage reduction), water supply, and related purposes, when found advisable due to significantly **changed physical or economic conditions**, and to report, thereon to Congress with recommendations on the advisability of **modifying the structures or their operations**, and for **improving the environment** in the **overall public interest**."

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What have we done so far?

Reconnaissance Phase

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Philpott Lake, Virginia (Section 216)
Reconnaissance Study
Initial Public Scoping Letter December 8, 2003

- Sent Scoping letter to 214 individuals, organizations and agencies
- 28 letters of comment were received
- 145 comments were identified
- Comments placed into 18 pre-determined categories
- These 18 Categories were combined to form 5 Study Focus Areas
  - ✓ **Shoreline Management and Erosion**
  - ✓ **Natural and Recreation Resources**
  - ✓ **Operating Policies and Administrative Procedures**
  - ✓ **Water Quality**
  - ✓ **Water Supply**
  - ✓ **Aesthetics**

Approval of participation in this feasibility study by the US Army Corps of Engineers, Wilmington District, was based on the report entitled:

905(b) Reconnaissance Report, Philpott Dam and Lake, Virginia, (Section 216) Study, Smith River

- ✓ Dated August 2004
- ✓ Approved 7 January 2005.

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Philpott Lake, Virginia (Section 216) Feasibility Study

What is a Cost Shared Feasibility Study?
Who is the Cost Sharing Partner?

Section 105 of the Water Resources Development Act of 1986 (Public Law 99-662 requires that feasibility studies undertaken by the U.S. Army Corps of Engineer be cost shared with a non-Federal Sponsor. The cost share percentage for this study is 50% federal and 50% non-Federal. The cost sharing partners for this study are:

Commonwealth of Virginia

U.S Army Corps of Engineers
Wilmington District

U.S. Army Corps
of Engineers
Wilmington District

Philpott Lake, Virginia (Section 216)
Feasibility Cost Sharing Agreement

USACE – Wilmington prepared a Project Management Plan (PMP) and Feasibility Cost Sharing Agreement (FCSA) which were coordinated with the Commonwealth of Virginia.

- ✓ FCSA executed Sep 2006
- ✓ Feasibility Phase Initiated October 2006

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Philpott Lake, Virginia (Section 216) Feasibility Study

Feasibility Cost Sharing Agreement Requirements for an Executive Committee

To provide consistent and effective communication, the Sponsor and the Government shall appoint senior representatives to an Executive Committee. Thereafter the Executive Committee shall meet regularly until the end of the Study Period.

Until the end of the Study Period, the Executive Committee shall generally oversee the Study consistently with the PMP.

Executive Committee Members

Commonwealth of Virginia	**U.S. Army Corps of Engineers**
Jeff Corbin Assistant Secretary Office of the Secretary of Natural Resources	Christine M. Brayman Deputy District Engineer for Programs and Project Management

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Philpott Lake, Virginia (Section 216) Study

What Guides the Philpott 216 Study?

Project Management Plan
November 2006

A Project Management Plan (PMP) guides conduct of this study. The PMP is a changing document, updated as the study progresses. It likely will be updated based on results of today's meeting. Each of you was provided a copy of the PMP as an attachment to your email invitation to today's meeting.

- ✓ Draft PMP Completed Jul 2005
- ✓ PMP Coordinated With Sponsor Oct 2006
- ✓ PMP Approved By Sponsor/USACE and Finalized Nov 2006
- ✓ Stakeholders Provided Copy of PMP Feb 2007

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Philpott Lake, Virginia (Section 216) Feasibility Study

Day to Day Study Management and Oversight

Lead Planner	Richard Lewis	USACE
Project Manager USACE	Ben Lane	
Project Manager/ Planner	Bud Laroche	VADGIF

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Wilmington District

Commonwealth of Virginia
Department of Game and Inland Fisheries

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Philpott Lake, Virginia (Section 216) Feasibility Study

Characteristics of this Section 216 Study

- ✓ Comprehensive watershed approach. Benefits from and impacts on all resources will be considered. Focus on operation of and flow releases from the completed Philpott Lake project.

- ✓ Will consider problems and opportunities which can be addressed by making changes to project structures or operations.

- ✓ Address the concerns of the study sponsor, resource agencies, and all of the stakeholders.

- ✓ Not a basin study. Focus on and limited to problems and opportunities in connection with the operation of and flow releases from the completed Philpott Lake project. Will not consider all water resource problems and opportunities throughout the river basin.

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Philpott Lake, Virginia (Section 216) Feasibility Study
Cost Share Partners' Critical Decision Points for the Three Stage Study Approach

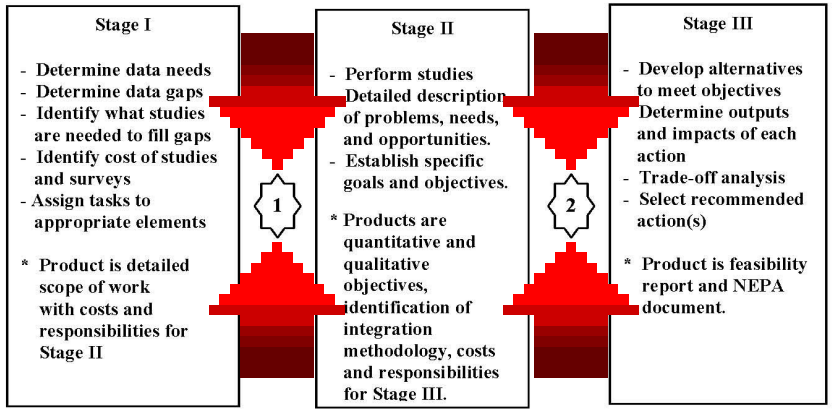
ATTACHMENT 4

THREE STAGE STUDY APPROACH

Corps Requirements: PMP and FCSA must identify full cost of feasibility study
FCSA must identify allocation of costs for each partner

Sponsor Requirements: PMP should be structured to be useful to project sponsor and beneficiaries.
PMP should identify stakeholder contributions
PMP should address tasks, methods, costs, and responsible parties

Actions: Project Management Plan will be structured to identify a 3-Stage approach, identify Subject Matter Specialists for Stage I activities, and costs for each project Stage. The three Stages are described in the following table.


Stage I
- Determine data needs
- Determine data gaps
- Identify what studies are needed to fill gaps
- Identify cost of studies and surveys
- Assign tasks to appropriate elements
* Product is detailed scope of work with costs and responsibilities for Stage II
Stage II
- Perform studies Detailed description of problems, needs, and opportunities.
- Establish specific goals and objectives.
* Products are quantitative and qualitative objectives, identification of integration methodology, costs and responsibilities for Stage III.
Stage III
- Develop alternatives to meet objectives Determine outputs and impacts of each action
- Trade-off analysis
- Select recommended action(s)
* Product is feasibility report and NEPA document.
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2

1 Decision Point 1 – what studies, surveys, etc. will be conducted in Stage II and how will the costs be allocated.

2 Decision Point 2 – what objectives will be addressed in Stage III and how will costs be allocated.

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Philpott Lake, Virginia (Section 216) Feasibility Study

Stage I Study Outputs

Purpose of Stage I

- Determine Data Requirements for Study

  - ✓ Determine data gaps
  - ✓ Identify what studies are needed to fill gaps
  - ✓ Identify cost of studies and surveys
  - ✓ Assign tasks to appropriate elements

Products of Stage I

- Detailed scope of work for Stage II effort
- Estimated costs for Stage II effort
- Recommended Method of Accomplishment for Stage II effort

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Philpott Lake, Virginia (Section 216) Feasibility Study
Stage II Outputs

Purpose of Stage II

- Perform required studies
- Establish specific goals and objectives

Products of Stage II

- Quantitative and qualitative objectives for Stage III Effort
- Identification of integration methodology for Stage III Effort
- Estimate costs for Stage III effort
- Establish responsibilities for Stage III.

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Philpott Lake, Virginia (Section 216) Feasibility Study
Stage III Outputs

Purpose of Stage III

- Develop alternatives that meet objectives
- Determine outputs and impacts of each action
- Trade-off analysis
- Select recommended action(s)

Products of Stage III

- Product is feasibility report and NEPA document.

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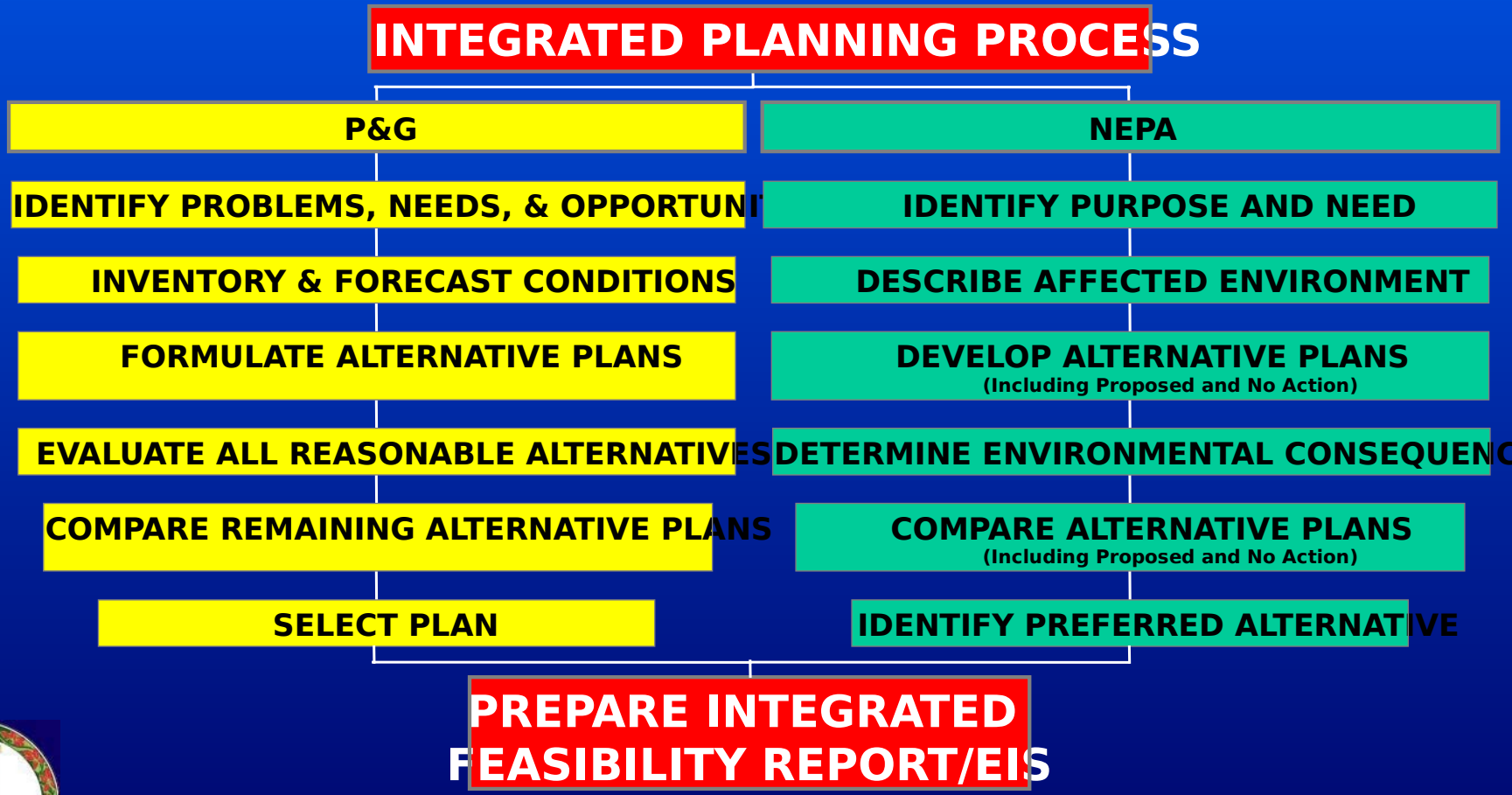
Philpott Lake, Virginia (Section 216) Feasibility Study

Phase III Study Flow Chart
Integrated Principles and Guidelines (P&G) & National Environmental Policy Act (NEPA) Planning Process



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Philpott Lake, Virginia (Section 216) Feasibility Study
Study Schedule

Task	Status	Estimated Schedule
Complete reconnaissance report 905(b)	Complete	Sep 2004
Complete reconnaissance phase – FCSA executed	Complete	Sep 2006
Begin phase I of feasibility phase	Complete	Oct 2006
Project Management Plan (PMP) completed	Complete	Nov 2006
Technical work groups formed/Team leaders assigned		Mar 2007
Complete phase I-Work groups complete scopes of work		Feb 2008
Complete phase II-Data collection, studies, modeling		Feb 2009
Select recommended plan		Dec 2009
Complete draft feasibility report and NEPA documents		Jun 2010
Complete NEPA coordination and processing		Oct 2010
Complete final feasibility report and submit to Division		Dec 2010
Feasibility report approved by Division		Jan 2011
Washington level comments, reviews and approval		
Report Recommendations Submitted to Congress		

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Philpott Lake, VA (Section 216) Reconnaissance Study

Reconnaissance phase cost $138,000 – all Federal cost

Recon phase completed and FCSA executed September 2006

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Philpott Lake, VA (Section 216) Budget and Appropriations

	Federal Budget	Congressional Appropriations
• FY 2003	0	$ 17,000
• FY 2004	0	67,000
• FY 2005	0	40,000
• FY 2006	0	99,000
• FY 2007	0	?
TOTAL	0	$ 223,000

- Study never in the Federal budget. Funded to date by Congressional adds.
- The feasibility phase started in October 2006. FY 2007 funds uncertain, but feasibility proceeding with carryover funds.

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Philpott Lake, VA (Section 216) Feasibility Study Cost Estimate

- The feasibility phase started in October 2006

	Estimated Cost	Federal	Nonfederal
• Phase 1	$ 400,000	200,000	200,000
• Phase 2	1,000,000	500,000	500,000
• Phase 3	750,000	375,000	375,000
• Contingency	350,000	175,000	175,000
• TOTAL	$ 2,500,000	$1,250,000	$1,250,000

- Sponsor's share can be cash or work-in-kind credit.
- Federal and nonfederal cost share of $300,000 to $400,000 each per year for several years is required to complete the study.

Philpott Lake

Team Status

7 March 2007

Natural and Recreation Resources	Basic* Team In Place
Operating Policies and Administrative Procedures	Combined with John
Water Quality	Need to Establish Team
Water Supply	Need to Establish Team
Aesthetics	Deferred Until Stage III
Shoreline Management and Erosion	Deferred Until Stage

* Additional stakeholders interested in this area of study are welcome

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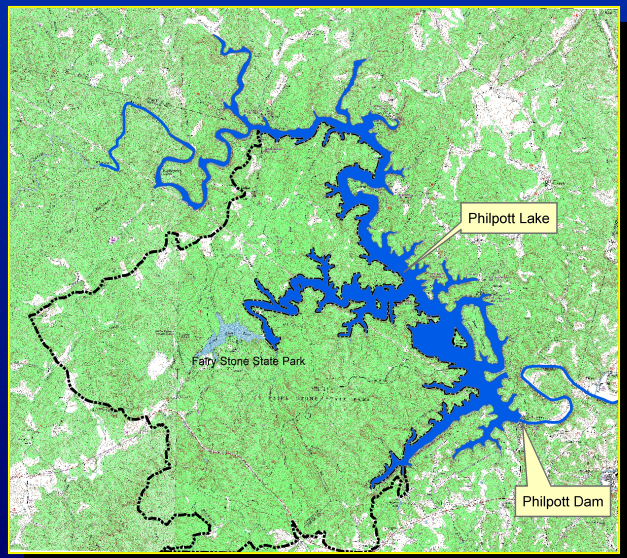
Philpott Lake, Virginia (Section 216) Feasibility Study

Work Group Selection Process

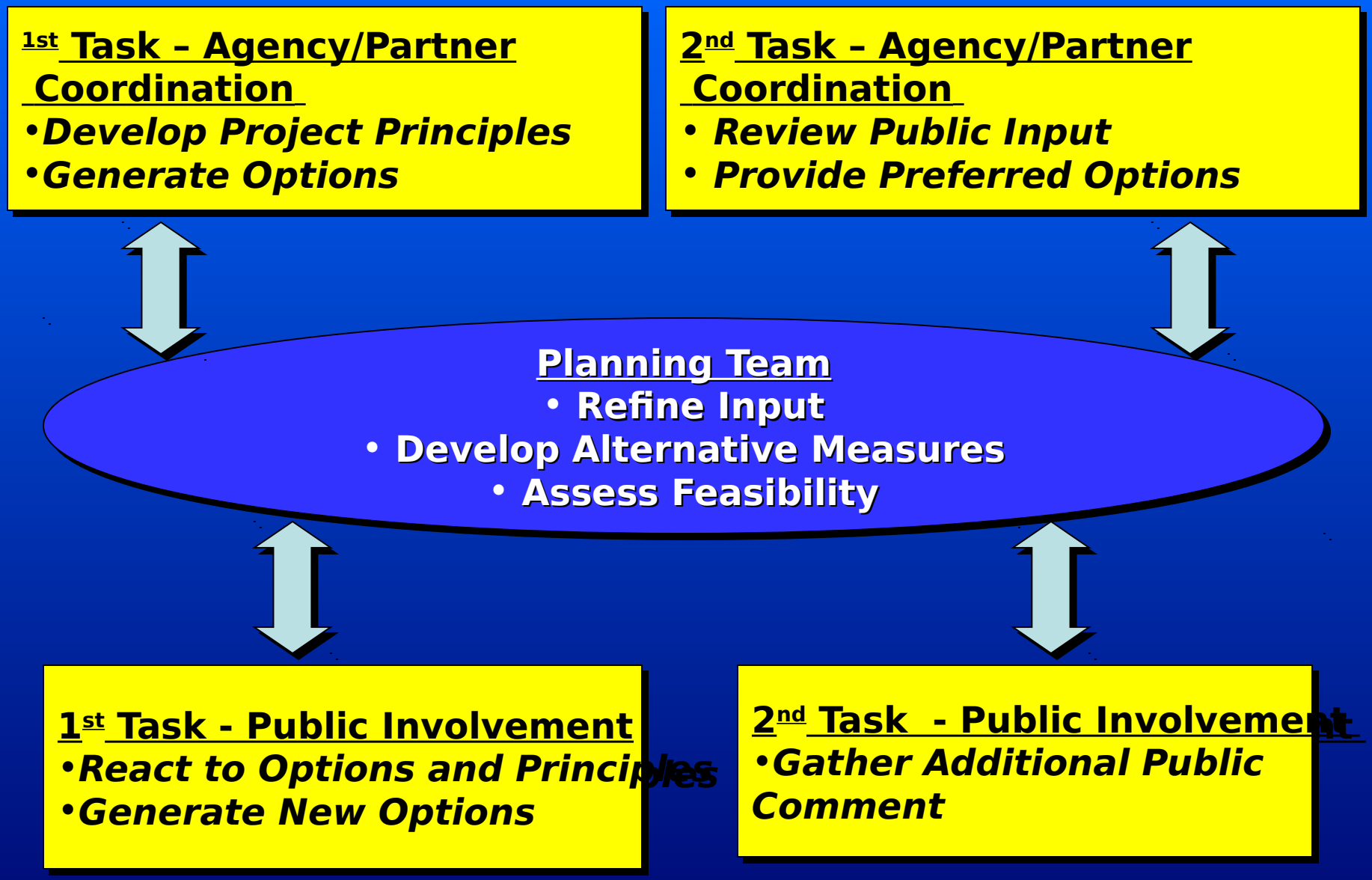
- ✓ Describe the Work Group's Function
- ✓ Describe the Desired Skills Necessary for Work Group Participation
- ✓ Solicit Volunteers
- ✓ Cost Share Partners Recommend Members for Work Groups
- ✓ Submit Proposed Work Groups to Executive Committee for Approval
- ✓ Work Groups Begin Consider Tasks Outlined in the PMP

Philpott Lake

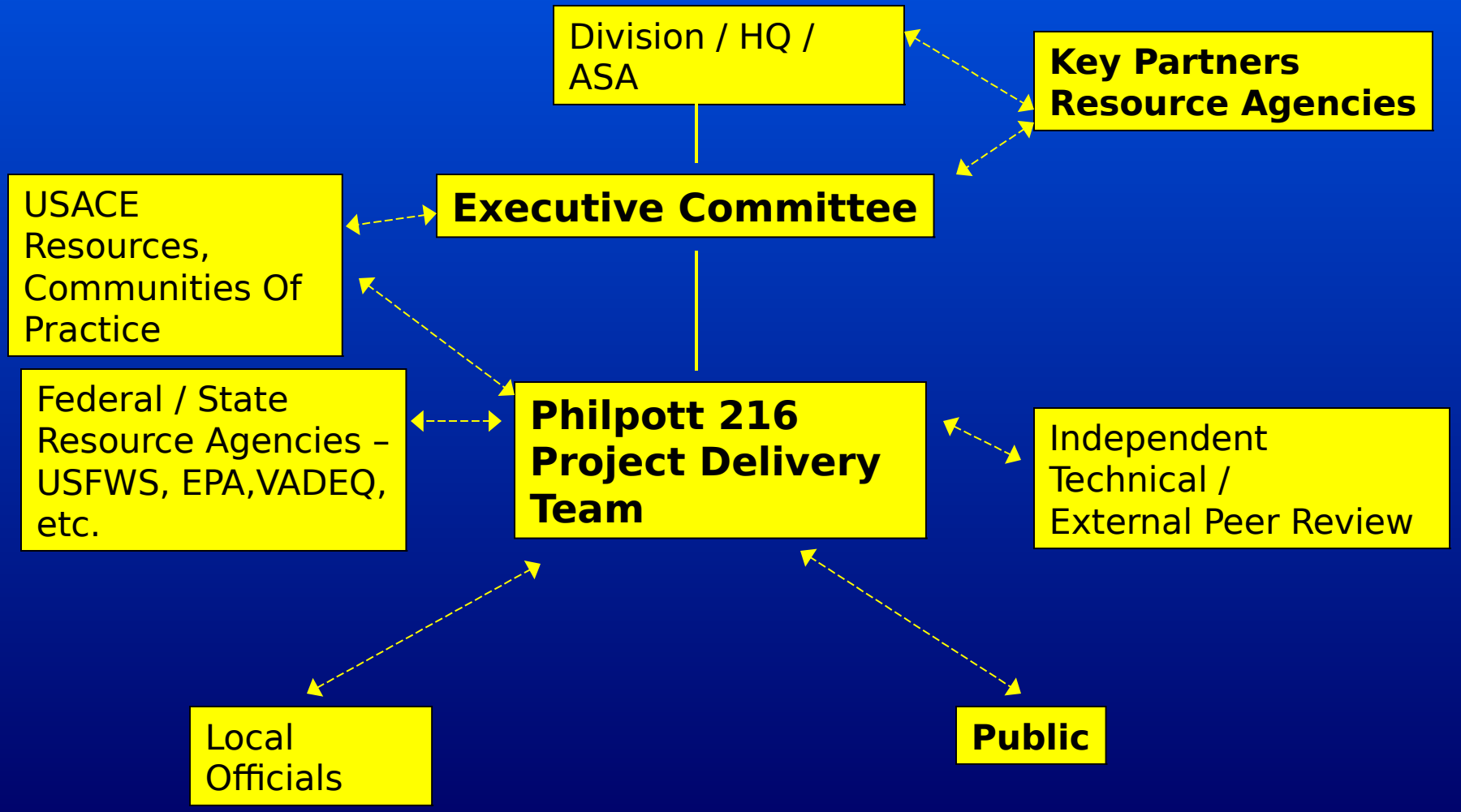
Philpott 216 - A Collaborative Effort



- **Public, Agency & Regional Involvement**
  - Public Involvement is a Required Element of the Philpott 216
  - Multiple Interests, Opportunities, and Needs
  - Coordination with Federal, State and Local Partners and Interests
  - Multi-step Process
  - Need for Innovation - Project Web Site etc.
- **Independent Technical Review and External Peer Review Teams**


1st Task – Agency/Partner Coordination
•Develop Project Principles
•Generate Options
2nd Task – Agency/Partner Coordination
• Review Public Input
• Provide Preferred Options
Planning Team
• Refine Input
• Develop Alternative Measures
• Assess Feasibility
1st Task - Public Involvement
•React to Options and Principles
•Generate New Options
2nd Task - Public Involvement
•Gather Additional Public Comment

Organizational Structure


Division / HQ / ASA
Key Partners Resource Agencies
USACE Resources, Communities Of Practice
Executive Committee
Federal / State Resource Agencies – USFWS, EPA,VADEQ, etc.
Philpott 216 Project Delivery Team
Independent Technical / External Peer Review
Local Officials
Public

Philpott 216 – Water Quality

- **Downstream of Dam**
- **Within Reservoir**

- **Review Existing WQ Data**
- **Determine WQ Goals and Objectives**
- **Evaluate Applications of WQ Models**
- **Prepare SOW for Additional WQ Data If Needed**
- **Evaluate WQ Effects of Management Option Scenarios**

Study Participant List

If you would like to be on the Philpott Study Participant List
Please provide your name, address, telephone number, and e-mail to:

Contact: Richard H. Lewis
Plan Formulation & Economics Section
Address: U.S. Army Corps of Engineers
Wilmington District
Post Office Box 1890
Wilmington, North Carolina 28402-1890
Telephone: (910) 251-4755
FAX: (910) 251-4744
E-Mail: richard.h.lewis@saw02.usace.army.mil

Philpott (Section 216) Feasibility Study Web Page

Philpott Lake